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(54) SYSTEM AND METHODS FOR THE CLUSTER OF MEDIA

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	G06F 3/0482	(2013.01)

(52) U.S. Cl.

(58) Field of Classification Search

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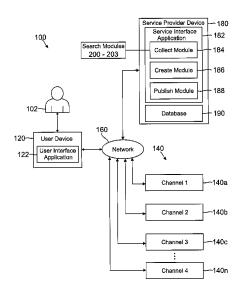
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(57) ABSTRACT

A computer implemented method for the cluster of media, the method comprises, selecting a media search source via a user interface; providing a form-based interface that allow the entry of inputs to form a media search query; submitting the media search query to the media search source; receiving a media search result for viewing on the user interface based on the media search query, the media search result comprising media items; displaying the media search result in a collection depository on the user interface; and clustering the media items into one or more stacks having a variable number of the media items, wherein the method is performed by one or more processors adapted to execute instructions stored on one or more memory components of the computer, is described herein.

18 Claims, 20 Drawing Sheets



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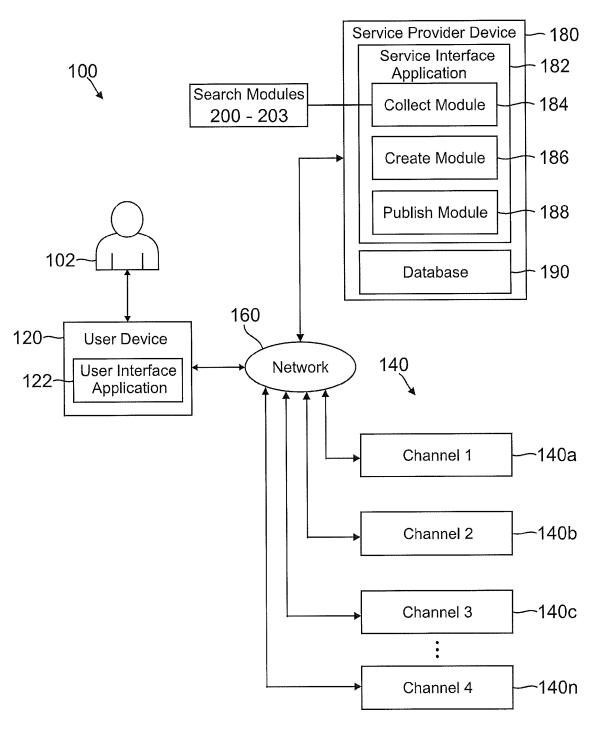


FIG. 1

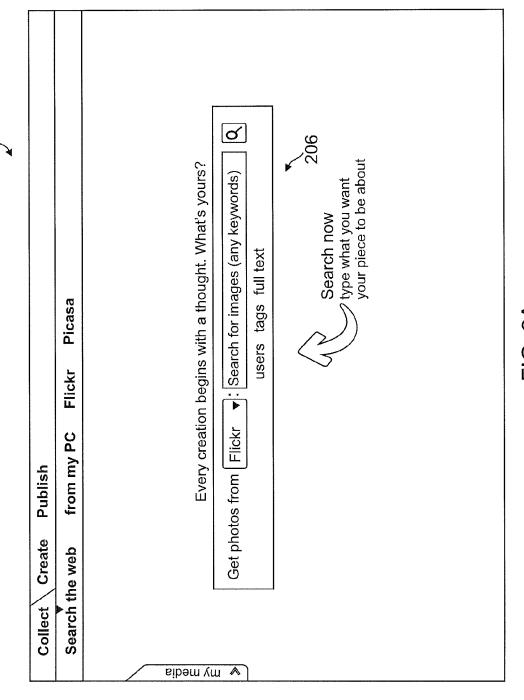


FIG. 2A

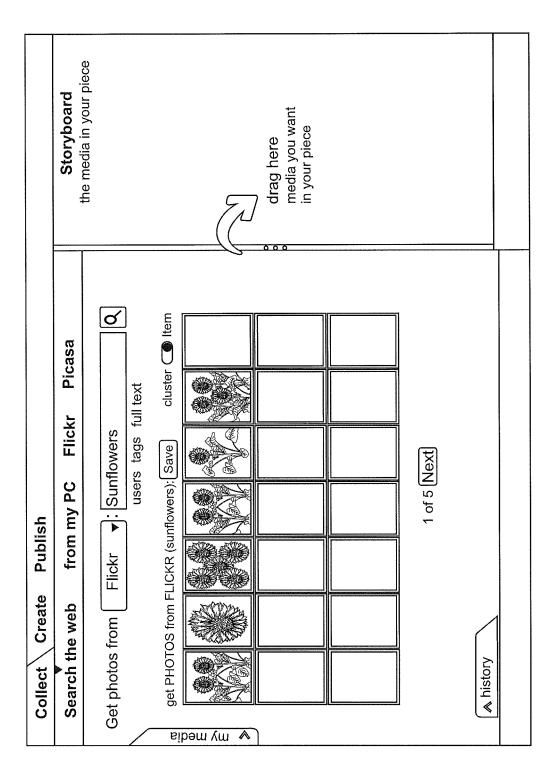
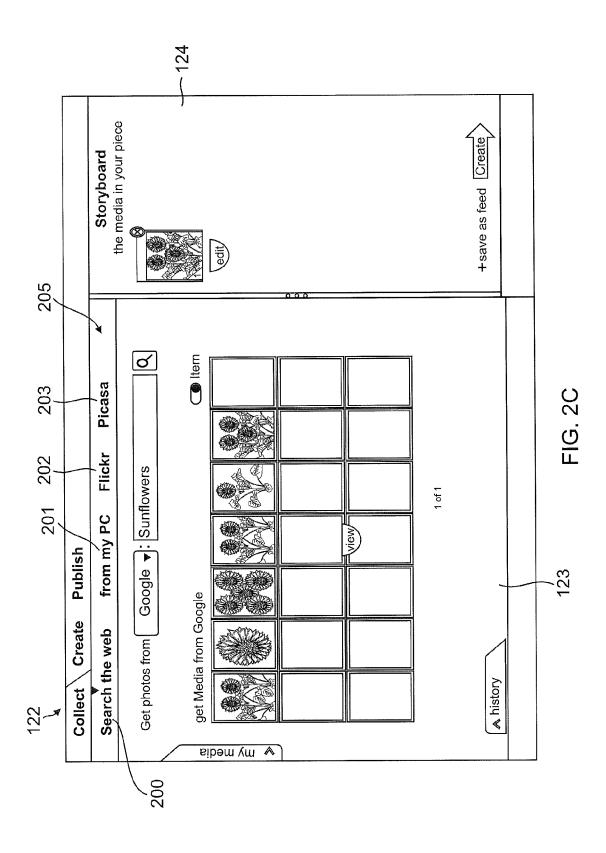
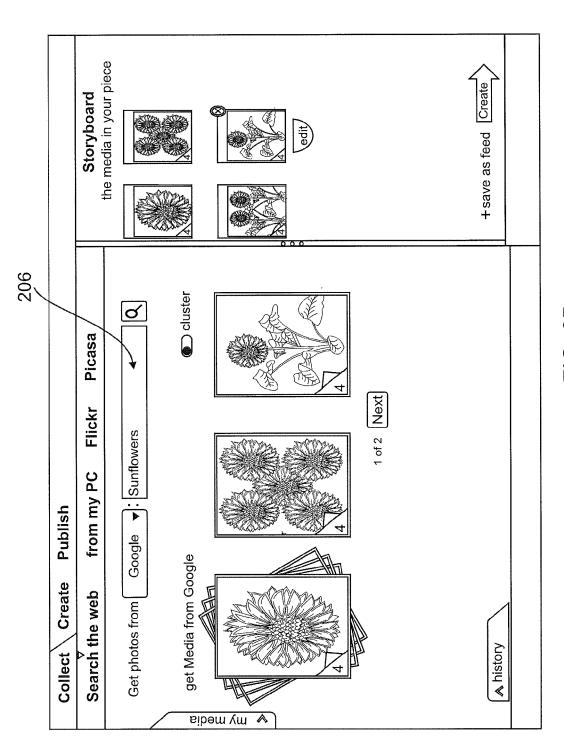


FIG. 2B





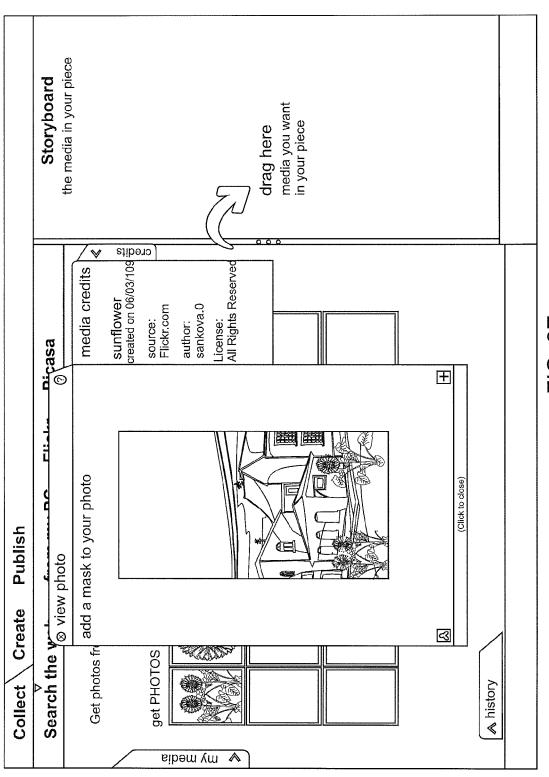


FIG. 2E

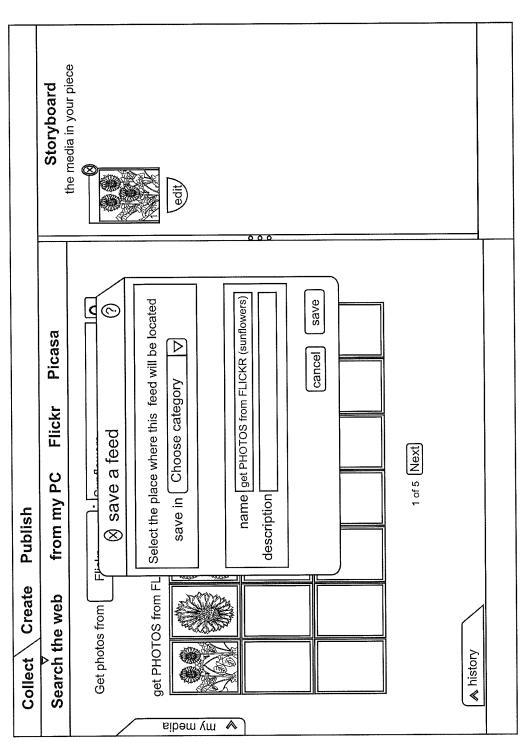


FIG. 2F

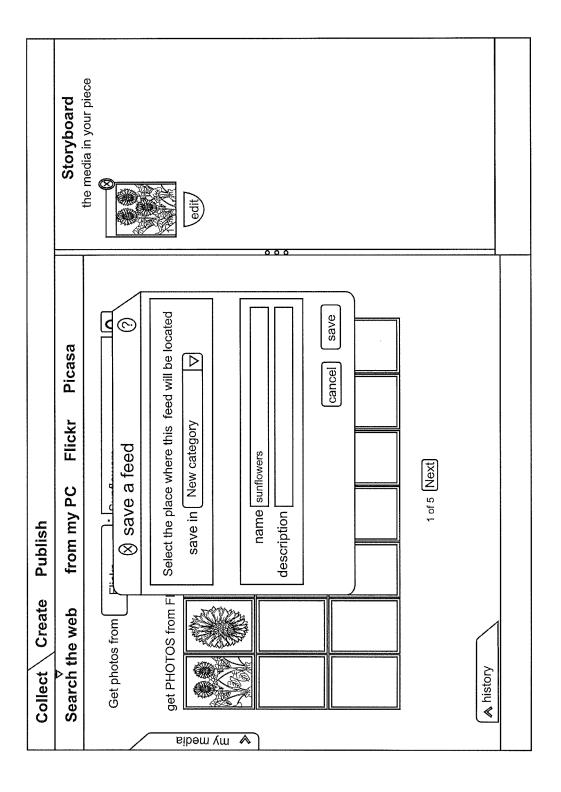
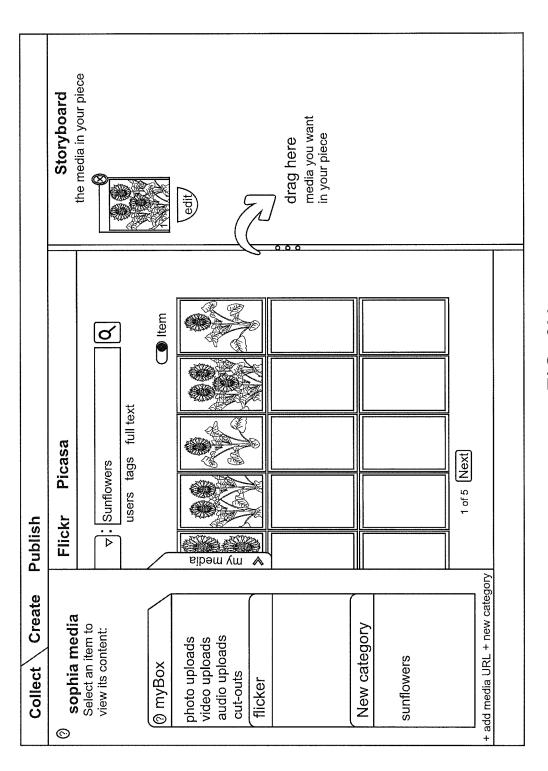


FIG. 2G



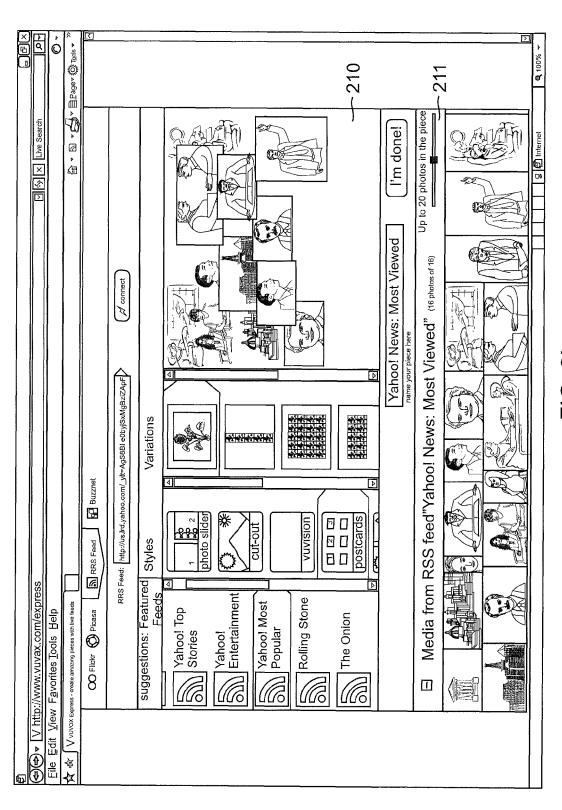


FIG. 2

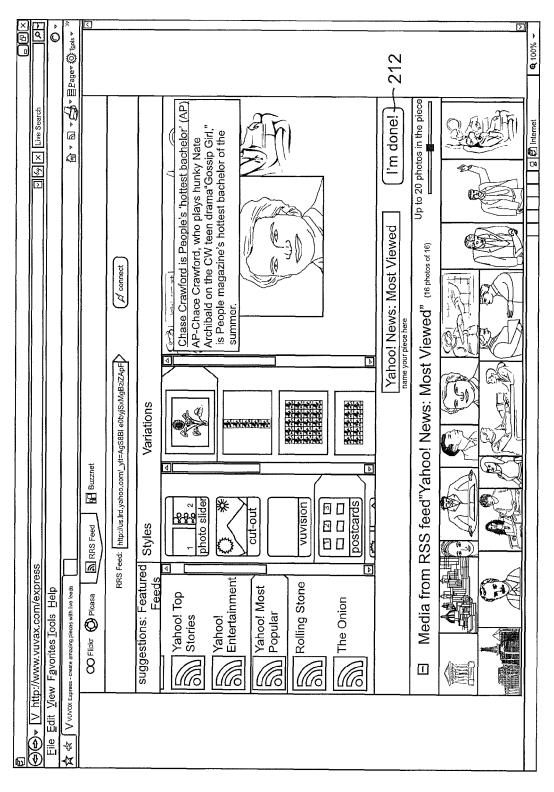


FIG. 2J

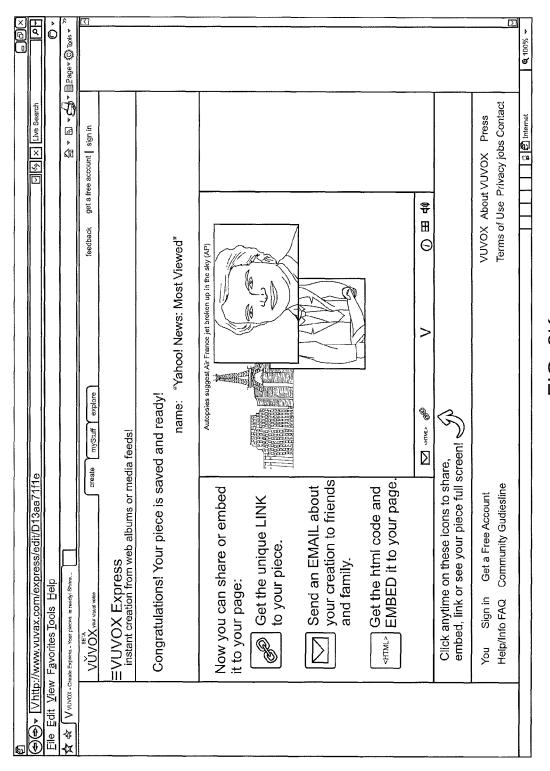


FIG. 2K

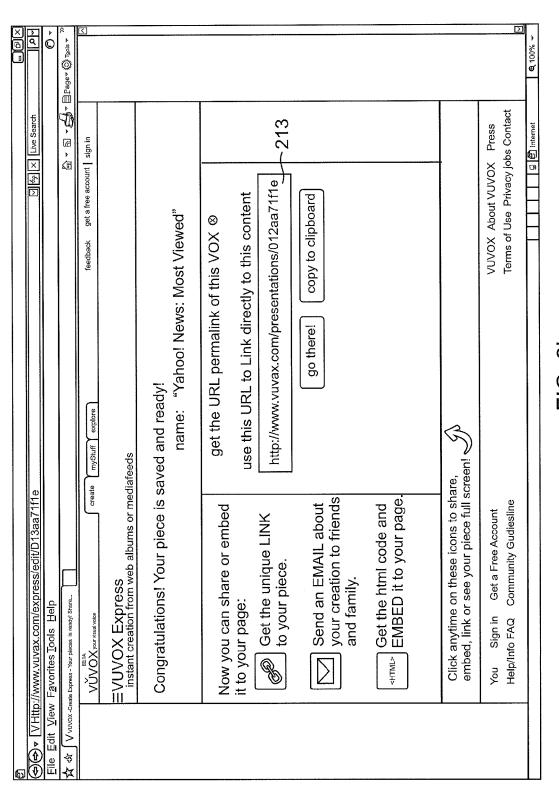


FIG. 2L

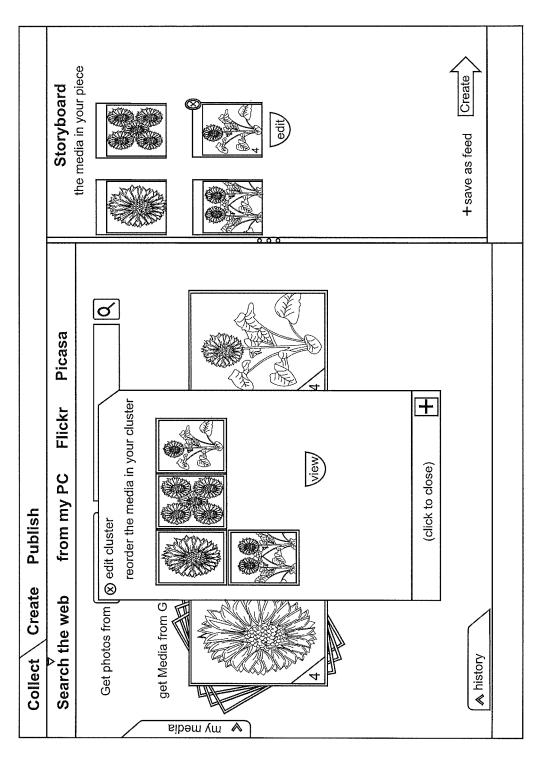


FIG. 2M

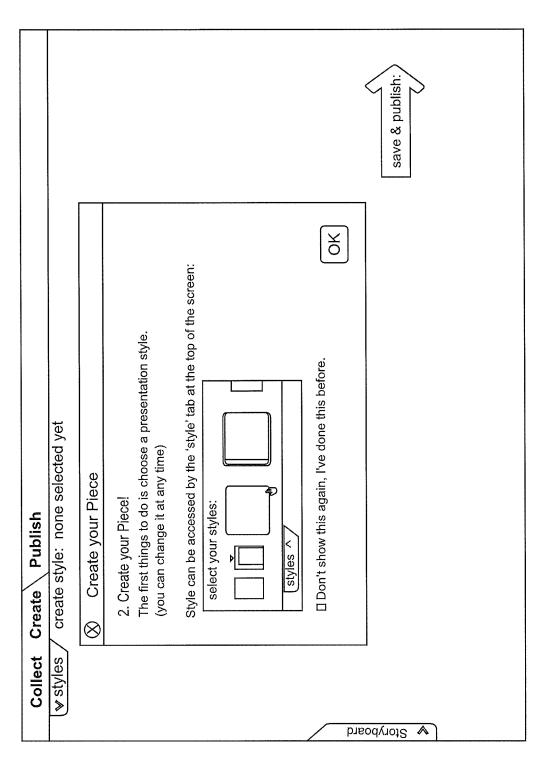


FIG. 2N

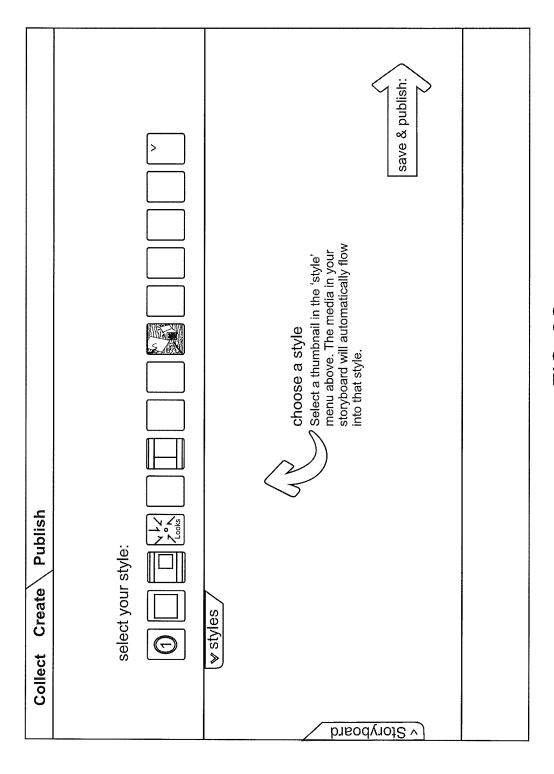


FIG. 20

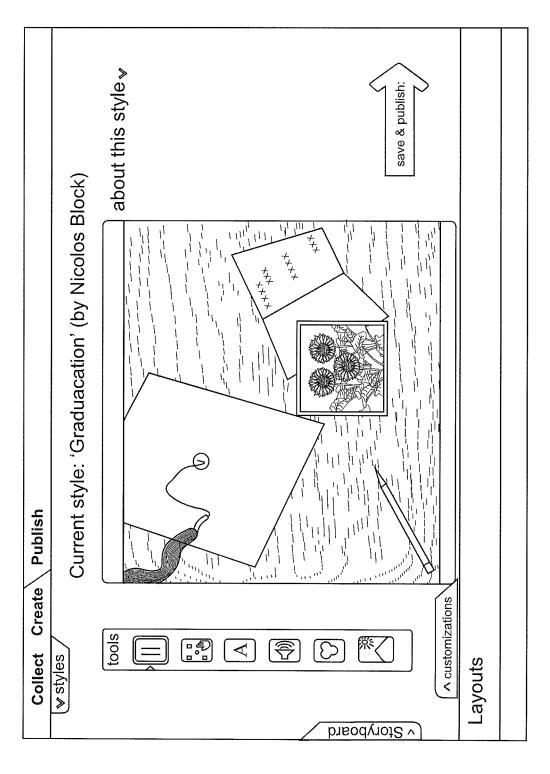
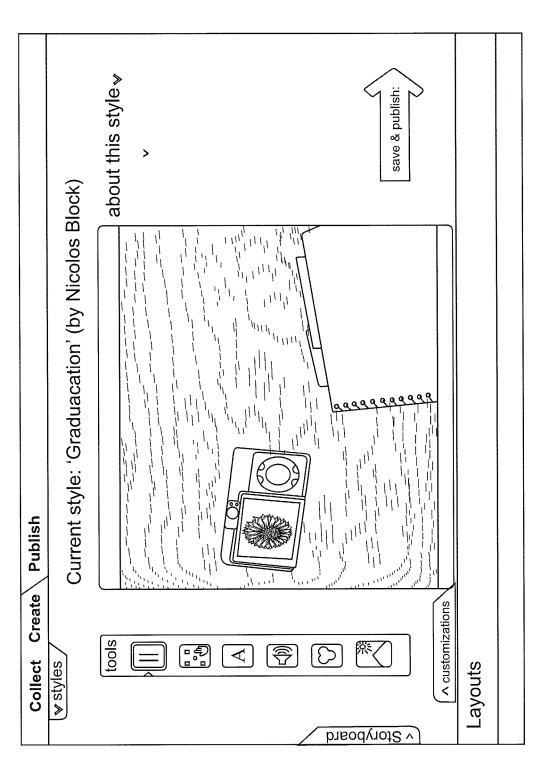
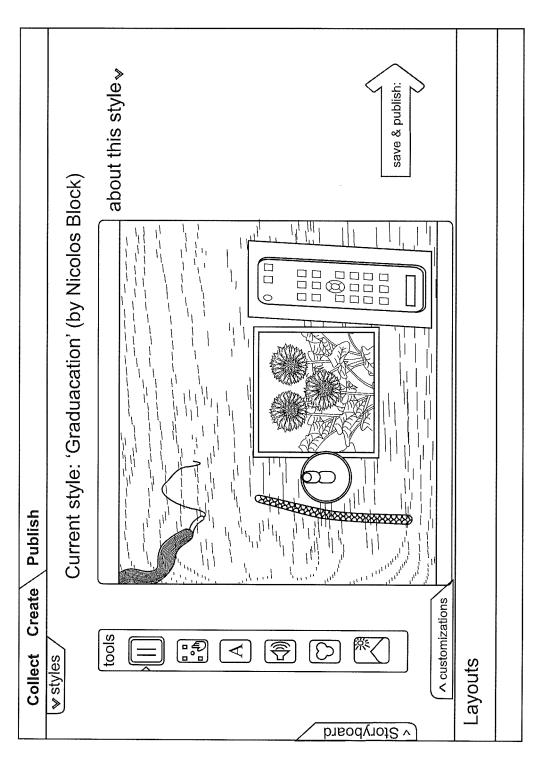


FIG. 2P





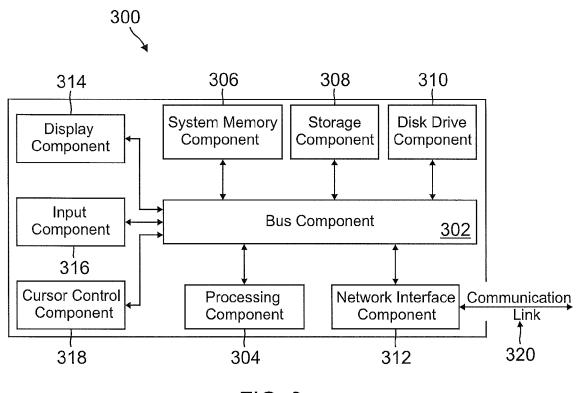


FIG. 3

SYSTEM AND METHODS FOR THE CLUSTER OF MEDIA

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority and the benefit of U.S. Provisional Patent Application No. 61/078,288, filed Jul. 3, 2008, entitled, "Multi-media Online Presentation System and Method," the entire disclosures which is incorporated herein 10 by reference.

BACKGROUND

1. Field of Invention

The present invention generally relates to the collection of media, and more particularly to a system and methods for the search, collection, saving, and cluster of media for use in, among other things, a network-based multimedia presentation.

2. Related Art

Multimedia is media and content that utilizes a combination of different content forms. The term is used in contrast to media that only utilizes traditional forms of printed or hand-produced text and still graphics. In general, multimedia 25 includes a combination of text, audio, still images, animation, video, and interactivity content forms. Multimedia is usually recorded and played, displayed, or accessed by information content processing devices, such as computerized and electronic devices. Multimedia finds its application in various areas including, but not limited to, social marketing, advertisement, art, education, entertainment, engineering, medicine, mathematics, business, scientific research and spatial temporal applications.

A variety of online websites are presently available to 35 enable the creation and presentation including the publication of some form of multimedia. For example, MixerCast enables a user to build a social marketing application from scratch. Scrapblog enables a user to combine photos, videos, audio and text to create multimedia scrapbooks. Smilebox facili-40 tates "creative messaging" that draws elements from photo services, scrapbooking, and e-cards.

Each website will typically provide one or more online tools for the creation and customization of the multimedia. Such online tools and/or desktop tools such as Photoshop, 45 Illustrator, etc., allow the user to collect, edit, create, and publish or distribute the multimedia. In this regard, various style presentations may be utilized, photos may be resized and text may be added, video may be inserted, and/or links to other sites or presentations may be provided. Despite providing some level of customization, multimedia tools currently available are often cumbersome and difficult to use and thus limit the self-expression and creativity of the non-professional user when creating multimedia presentations. Accordingly, there exists a need for a relatively more robust multi- 55 media creation tool including a system and methods for the search, collection, saving, and cluster of media for use in, among other things, a network-based multimedia presentation.

SUMMARY

For purposes of summarizing the disclosure, exemplary embodiments of systems and methods for automatic media population of a style presentation have been described herein. 65

In one embodiment, a computer implemented method for the cluster of media, the method comprises selecting a media 2

search source via a user interface; providing a form-based interface that allow the entry of inputs to form a media search query; submitting the media search query to the media search source; receiving a media search result for viewing on the user interface based on the media search query, the media search result comprising media items; displaying the media search result in a collection depository on the user interface; and clustering the media items into one or more stacks having a variable number of the media items, wherein the method is performed by one or more processors adapted to execute instructions stored on one or more memory components of the computer.

In another embodiment, a computer system for the cluster media, the system comprises a storage device; a processing element having a processing program and access to the storage device; and a process-readable medium having executable instructions thereon to direct the processing system when used by the processing element to: select a media search source via a user interface; provide a form-based interface that allow the entry of inputs to form a media search query; submit the media search query to the media search source; receive a media search result for viewing on the user interface based on the media search query, the media search result comprising media items; display the media search result in a collection depository on the user interface; and cluster the media items into one or more stacks having a variable number of the media items.

In still another embodiment, a computer-readable medium having a computer executable instructions for performing a method comprises selecting a media search source via a user interface; providing a form-based interface that allow the entry of inputs to form a media search query; submitting the media search query to the media search source; receiving a media search result for viewing on the user interface based on the media search query, the media search result comprising media items; displaying the media search result in a collection depository on the user interface; and clustering the media items into one or more stacks having a variable number of the media items.

These and other features and advantages of the present invention will be more readily apparent from the detailed description of the embodiments set forth below taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a block diagram of a system configured to facilitate the creation and publishing and/or sharing of multimedia presentations over a network.

FIGS. 2A-2M show elements, components, or stages for the search, collection, edit, and saving of media in accordance with one embodiment.

FIGS. 2N-2R show elements, components, or stages for the automatic media population of a style presentation in accordance with one embodiment.

FIG. 3 is a block diagram of a computer system suitable for implementing one or more embodiments of the present disclosure.

Exemplary embodiments and their advantages are best understood by referring to the detailed description that follows. It should be appreciated that like reference numerals are used to identify like elements illustrated in one or more of the figures, wherein showings therein are for purposes of illustrating exemplary embodiments and not for purposes of limiting the same.

DETAILED DESCRIPTION

Embodiments of the present disclosure related to systems and methods for the automatic media population of a style

presentation. As indicated above, multimedia presentations may find application in various areas including, but not limited to, social marketing, advertisement, art, education, entertainment, engineering, medicine, mathematics, business, scientific research and spatial temporal applications.

In one embodiment a system and method provides for a robust end-to-end digital media creation architecture that enables a user to create rich multimedia presentations and clips online with real-time editing and authoring, and then share or publish the media online. As shown in FIG. 1, the system 100 includes at least one client device 120 (e.g., network computing device), one or more multimedia distribution channels 140 (e.g., network server devices), and at least one service provider device 180 (e.g., network server device) in communication over the network 160.

In one embodiment, the network 160 may be implemented as a single network or a combination of multiple networks. For example, in various embodiments, the network 160 may include the Internet and/or one or more intranets, landline 20 networks, wireless networks, and/or other appropriate types of communication networks. In another example, the network 160 may comprise a wireless telecommunications network (e.g., cellular phone network) adapted to communicate with other communication networks, such as the Internet. As such, 25 in various embodiments, the at least one client device 120, the multimedia distribution channels 140, and the at least one service provider device 180 may be associated with a particular link (e.g., a link, such as a URL (Uniform Resource Locator) to an IP (Internet Protocol) address).

In various embodiments, the at least one client device 120 may be implemented using any appropriate combination of hardware and/or software configured for wired and/or wireless communication over the network 160. The client device 120 may be implemented as a personal computing device 35 (e.g., a personal computer (PC)) in communication with the network 160, such as the Internet. In various other implementations, the client device 120 may be implemented as one or more wireless telephones (e.g., cell phones), personal digital assistants (PDAs), notebook computers, and/or various other 40 generally known types of wired and/or wireless computing devices. It should be appreciated that the client device 120 may be referred to as a user device or customer device without departing from the scope of the present disclosure.

In one embodiment, the client device 120 includes a user 45 interface application 122 that may be utilized by a user 102 to conduct information transactions with the distribution channels 140 and the service provider server 180 over the network 160. For example, the user interface application 122 may be implemented as a multimedia presentation application to collect, create and publish information via the network 160. In various implementations, multimedia presentations may be published to and/or shared with one or more of the multimedia channels 140 via the user interface application 122 over the network 160.

In one implementation, the user interface application 122 comprises a software program, such as a graphical user interface (GUI), executable by a processor that is configured to interface and communicate with the multimedia channels 140 and the service provider server 180 via the network 160. In 60 another implementation, the user interface application 122 comprises a browser module that provides a network interface to browse information available over the network 160. For example, the user interface application 122 may be implemented, in part, as a web browser to view information available over the network 160. In another example, each member of the user group 102 is able to access multimedia websites

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via the one or more multimedia channels 140 to view, collect and publish multimedia presentations over the network 160.

In various embodiments, the client device 120 may include other applications as may be desired in one or more implementations to provide additional features available to the user 102. In one example, such other applications may include security applications for implementing client-side security features, programmatic client applications for interfacing with appropriate application programming interfaces (APIs) over the network 160 or various other types of generally known programs and/or applications. In other examples, these other applications may interface with the user interface application 122 for improved efficiency and convenience. For example, files, data, and/or various types of information may be imported from multimedia software directly into the user interface application 122 for ease of access to multimedia files (e.g., audio, video, pictures, clip-art, etc.).

The client device 120 may include a user identifier, which may be implemented, for example, as operating system registry entries, cookies associated with the user interface application 122, identifiers associated with hardware of the client device 120, or various other appropriate identifiers. The user identifier may include attributes related to the user 102, such as personal information (e.g., a user name, password, etc.). In one implementation, the user identifier may be passed to the service provider server 180 during publishing and/or sharing of a multimedia presentation.

In one embodiment, the multimedia distribution channels 140 may be maintained by one or more resource providers and/or entities (e.g., social networking sites, resource information sites, management sites, merchant sites, etc.) in communication with the network 160. In this regard, the service provider server 180, discussed below, may maintain or provide access to the one or more of the multimedia distribution channels. The multimedia distribution channels 140 may be implemented using any appropriate combination of hardware and/or software configured for wired and/or wireless communication over the network 160. In one implementation, the multimedia distribution channels 140 may be implemented as a network computing device (e.g., a network server) in wired and/or wireless communication with the network 160.

In one embodiment, the service provider server 180 may be maintained by an online transaction processing provider and/ or entity in communication with the network 160. As such, the service provider server 180 may be implemented using any appropriate combination of hardware and/or software configured for wired and/or wireless communication over the network 160. In one implementation, the service provider server 180 may be implemented as a network computing device (e.g., a network server) in wired and/or wireless communication with the network 160.

As further shown in FIG. 1, the service provider server 180 includes a service interface application 182, which may be adapted to interact with the client device 120 to facilitate the collection of media, as well as the creation including editing and the publishing and/or sharing of multimedia presentations over a network. In one example, the service provider server 180 may be provided and implemented by PayPal, Inc. of San Jose, Calif., USA.

The service application 182, in one embodiment, utilizes a collect module 184, a create module 186, and a publish module 188 running on a standard web browser to collect information, create presentations, and publish presentations, respectively. As described in greater detail herein, the modules 184, 186, 188 enable users, such as the user 102, to collect diverse types of audio and visual media, create rich multimedia presentations with real-time editing and author-

ing using media software, such as Flash, and then share and/or publish the rich multimedia presentations with other users via the network 160. In one example, the collect, create, and publish modules 184, 186, 188 may be implemented within a standard web browser for interfacing with the user 102.

In one implementation, the user 102 is able to share multimedia presentations with other users via the media channels 140 and/or embed multimedia presentations directly in webpages of other users. For example, the user 102 may provide a unique URL link for the multimedia presentation to 10 other users. In another example, the user 102 may directly email multimedia presentations to multiple recipients and include a message with the email. In still another example, the user 102 may provide the source HTML (i.e., HyperText Markup Language) code to other users and/or embed the 15 source HTML code directly into another user's webpage. Still other examples include the ability to publish multimedia presentations on a website to sell a particular item or service for purchase. For items and/or services, a media rich presentation may help users market and sell items and/or services, which 20 may be valuable for high-end or high-priced items and/or services. Social and/or dating sites may utilize these multimedia presentations to provide online users with a way to better present themselves to other online users. In various implementations, some type of webpage may be presented in 25 a more dynamic manner by utilizing Rich Site Summary (RSS) Feeds, since, for example, a particular user's presentation may be continually changing with new media.

In various embodiments, the service provider server 180 may be configured to maintain, store and/or archive multime- 30 dia presentations in a database 190, each of which may include information related to one or more users, such as the user 102, and one or more multimedia channels, such as multimedia distributions channels 140. In various examples, the multimedia presentations may include attributes stored as 35 part thereof, and the attributes may be passed to the service provider server 180 as part of a creating, publishing and/or sharing the multimedia presentations.

Referring to FIG. 1 and FIGS. 2A-2M, in one embodiment, 202, 203, etc., to enable the user 102 to search, collect, view, and, store/save media including multimedia. Such media including audio, photographic images, video, and music media from a service source, such as a PC, RSS feeds, websites, and any other online source, is searched and collected 45 via a user interface, such as the user interface application 122, to a collection depository or library 123 associated with and viewable at same time as the storyboard 124 on the GUI of the interface application 122.

In various implementations, the user interface application 50 122 comprises multiple search tabs and/or links for the various search sources. Search-based modules 200-203 are aggregated in a drop-down combo interface 205 indexed by media type and media provider (FIG. 2C). Each search provider or search source advertises the media types it indexes, 55 and the number of type of inputs the search provider handles. For example, a search of the Flickr community may be done via "user", "tag", or "full text". When a search provider or search source is selected, the user interface updates 206 to show a form-based interface that allows the user to enter 60 necessary query inputs (FIG. 2A). Depending on the type of search provider or search source, when the user initiates a search, the request goes either to a service system server-side component 180 or directly to a third-party server-side component. When the request is to the search system the server- 65 side component handles all details of contacting the third party API, avoiding any browser security issues, and allowing

any results from the third-party to be normalized and cached, if desired. When requests go directly to the third-party server, that is a search source or search provider other than the service provider 180, the requests are subject to cross-site data restrictions imposed by the browsers and the Flash environment, and additional logic is needed to normalize any results to the service provider data model.

Search base modules may include account-based modules such as Flickr 202, mentioned above, and Picasa 203 that present an authentication interface allowing a user to connect to the user's public and/or private photos at a third-party hosting service. Depending on the APIs supported by the third-party, users can browse, sort, and select media from corresponding user accounts once the associated user has be authenticated.

Use of the collect module enables key words to be selected to form a search query to search photos in Flickr or videos in YouTube. For example, selecting the "full text" search criteria and typing in "sunflowers" in a Flickr search query results in pictures of sunflowers or photos from Flickr being presented on the user's GUI or media page. A result of the aforementioned search query in Fliclr is shown in FIG. 2B. The collected media (sunflowers) may be viewed individually as shown in FIG. 2C or as photo clusters as shown in FIG. 2D.

In this regard, the collect module or step enables the user to cluster media associated with a variable number of related media items in the collection depository and that can be dragged and dropped into the storyboard 124 The storyboard 124 is generally considered an area of the GUI reserved for the media that is later used in the creation of rich multimedia presentations. In this regard, during the process of media collection, the collection depository 123 may include multiple photos from a first search source, multiple photos from a second search source, or multiple videos from yet another search source while the storyboard 124 includes only those photos, videos, images, etc., that are at least at some point intended to be included in the creation of a rich multimedia presentation.

Media may be clustered based on time and author of the the collect module 184 includes search modules 200, 201, 40 media. If the user selects the cluster mode from the media page (FIG. 2D), the system performs a simple time based clustering using a sliding window. If consecutive photos fall within the window they are clustered together. The window duration is chosen based on a heuristic, generally, between for example, 10 seconds and 15 minutes are use based on the search provider. For example, as shown in FIG. 2E, each media item includes credits such as date created, source (Flickr.com), and author (Sankova.o). As such, in one embodiment, those photos collected within a predetermined time frame by the same author may be clustered together. In this regard, the size or number or media items in each cluster may vary. In an alternative embodiment, the user might be able to interactively adjust the window. Because large clusters can be undesirable, the system may split clusters above a predetermined maximum size. To split a cluster a sorted list of time differentials is created. The system then attempts to cluster by the largest time difference until all sub-clusters are smaller than the maximum predetermined cluster size.

The architecture allows explicit media to be added to the storyboard 124 or the entire query itself to be added to the storyboard 124. Placing desired media on the storyboard or clip board may be accomplished by dragging and dropping. As shown in FIG. 2B, the user can drag and drop desired individual pictures and/or clusters of pictures onto a storyboard 124 on the same screen as the collection depository 123. The pictures can be edited into stacks if desired. In another example, the collect module 184 provides media on a

user's media page (i.e., not placed on the storyboard). For example, with videos, a desired video can be placed onto the user's media page by typing in the corresponding URL in YouTube. The system can then display the complete as well as a series of shorter video clips.

In this regard, the collect module or step enables the user to collect video and to separate or section the video into a cluster of smaller separate video segments. More specifically, media including video, as well as audio/music, may be divided into a plurality of relatively smaller segments of a predetermined duration. The segment duration may be based on time or data size. The whole video or selected shorter clips, as well as the photos can then be dragged and dropped (relocated) into the storybook 124 section to create a presentation from the media collected.

The collect module **184** or step may include a "save" icon to enable the user to save media collected from the search source or external API in the collect depository **123** or storyboard **124** so that when the storyboard **124** is accessed, the media is easily accessible and available for use in editing or ²⁰ creating rich multimedia presentations in the storyboard **124**. In addition, the collect module **184** permits the search query to be saved; allowing for a "shortcut" to the query to be quickly accessed.

In this regard, as shown in FIGS. 2C and 2D, all of the 25 search-based modules 200-203 support persisting the query inputs, i.e., search query, to the search source as a Feed or network search path. In this regard, when the user starts a session, for example, with a particular application, the server returns a list of custom categories the user has created, and a 30 list of Feeds the user has created (FIG. 2F). Each Feed has a title, a category, and an xml-based persistence of the user inputs (FIG. 2G). The user then saves the search query as a network search or file path. If the user selects the Feed, i.e. "New category" and "sunflowers" from one of the multiple 35 search tabs within the "my media" tab the application resubmits the query and displays the resulting media (FIG. 2H).

In an alternative version of a Feed, the storyboard contents can be persisted as a Feed to allow saved references from multiple sources in one book marked location. Rather than 40 persisting query inputs, the Feed contains an xml representation of the clusters of media with sufficient information to reconnect to the media, typically a URL, media type, and possibly some additional user created metadata such as a title or caption. The architecture further allows "dynamic" Feeds 45 to search and saved for later use in creating multimedia presentations.

In an example of "dynamic media", the user can search photos in the user's Picasa account or an RSS Feed of "Yahoo Most Viewed" (FIG. 2I). In one embodiment, the photos or 50 RSS Feed are automatically shown at the bottom of the viewing page, as well as in a style viewing area 210 corresponding to the style chosen. As shown in FIG. 2I, the RSS Feed of Yahoo's Most Viewed is displayed in a postcard style corresponding to the selected postcard style. The viewing page 55 allows the user to select via a select slider 211 how many photos, videos, etc., are to be in the collected presentation page. For example, the number may default to twenty, but the user may select a different number and new photos with automatically be added or deleted from the currently viewed 60 photos. Individual photos, videos, etc., which represent some event, may be selected within the style viewing area 210 to access event related information and/or an event related URL where the related information provided.

As mentioned above, just as photos from Flickr or other 65 sources may be saved in the database 190, so to may the "dynamic" content of the RSS Feed and similar search ser-

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vices by selection of a save or "I'm done" icon 212, and added to a multimedia presentation. In this regard, in saving the "dynamic" content of the RSS Feed ("Yahoo Most Viewed") a URL permalink (network search path or file path) 213 is assigned to the RSS Feed (FIGS. 2K and 2L). The URL permalink 213 may then be added as a "hot spot" or as an individual frame within a multimedia presentation that is slightly different each time the presentation is viewed due to its "dynamic" or changing nature. The "dynamic" media object can refer to API calls, RSS Feeds, search queries, or any type of external call to a database where the parameters of that query can retrieve data or media dynamically.

As indicated above, once collected, the media may be saved and further categorized in the database 190 and edited on the system site via the service provider server 180. Editing may occur on the media page or in the storyboard and include one or more of sizing, rotating, overlying, moving and stacking various media backward and forward with an overlay or stack (FIG. 2M). Video may be broken up automatically by the service provider server 180 into smaller segments. Selected video segments may be combined and/or used as desired. Selected media may be placed on a virtual storyboard, such as a clipboard, on the same screen as the collection of media. Media may be edited either in the collection area/media page or in the storyboard. In still another example, uploading media may be delayed until editing is completed.

As shown in FIGS. 2N-2R, the service provider server 180 may automatically suggest a story idea to launch the creative process, or the user 102 may select a specific style or presentation tool. Within the presentation, there may be multiple styles, such as a picture frame, a television, a billboard, etc. In one implementation, media from the storyboard may be dragged and dropped onto the presentation. In this regard, media may be placed within the viewing window of each type of style.

Alternatively, the user can create a presentation from the media in the storybook section by selecting a style, such as a slide show, a photo slider, a room with different viewing areas including picture frames, etc. The media is then automatically loaded into the selected style. For example, a clustered set of photos may automatically play in frame, and a video clip may automatically play on a television. In another example, the branches of a tree are automatically filled with different selected media for viewing. Another style may be a page of postcards, such that when that style is selected, the previously chosen media is automatically filled into the postcards on a single page.

More specifically, in one embodiment, once media is collected, a storyboard located on the right side of the user interface may be populated with the collected media by dragging and dropping one or more of the media items or cluster of media items collected from the various media sources from the media collection area onto the storyboard for later use in creating a media piece (FIG. 2B). In this regard, the storyboard may includes two items collected from the web, one item uploaded from a PC, and a cluster of four items also collected from the web (FIG. 2D). Media positioned on the storyboard may be edited prior to creating a media piece. For example, individual items of media in a media cluster may be reordered (FIG. 2M). Once media has been collected and edited, media piece creation may proceed by clicking the create arrow at the bottom of the user interface and then choosing to proceed to the create module **186** (FIG. **2N**).

As indicated above, to begin the process of creating a media piece the user may select a thumbnail from the presentation "styles" menu (FIG. 2O). Presentation styles may include, but are not limited to, a picture frame, billboard,

kaleidoscope, street scene, landscape, etc. Once a "style" is selected media from the storyboard will automatically flow into or populate the chosen "style" (FIGS. 2P and 2R). In this regard, the presentation media shown in FIG. 2D has automatically populated corresponding presentation elements with the chosen presentation style. Some styles, which support movement of media as part of a presentation style, may provide the user with the ability to customize various characteristics of the movement such as speed of media rotation, etc., within the style.

Once the style is chosen, the user may also select different variations of the style. Each particular style typically has a different set of variations suited for that style. For example, for the tree style, a user may select different types of frames on the branches to contain the media, a specific background 15 may be selected from a user image, and different style trees may be used. For the photo slider, different types and styles of frames may be used, as well as different types of presentations, e.g., spacing between photos, no spacing, and background selection. For the page of postcards, the user may 20 select different configurations of the postcards on the page as well as different backgrounds for the page.

Once in the style presentation, the media may be edited. For example, the media may be rotated, sized, cut-out (e.g., by selecting the boundaries of an image, such as with clicks to 25 designate points along the boundary, enabling as coarse or fine a resolution as desired), moved forward or backward in relation to adjacent media, slide multiple images to add or remove spaces within the presentation, and adding a hotspot (e.g., selecting an area of the image for additional information, such as adding a link, video, text, etc.). Other editing features may include adding audio to the background, adding text, and/or distorting images. This further editing may depend on the style chosen, as different styles may have different editing capabilities. In one aspect, the editing may 35 be achieved in real-time so that the user 102 may quickly and easily see the results and change them as needed.

In one embodiment, the publish module **186** enables the user **102** to share, publish and/or distribute the presentation when, for example, the presentation is completed. In one 40 implementation, as described herein, the presentation may be saved in the database **190** of the service provider server **180**. Once saved, the user **102** may share, publish and/or distribute presentations to any selected channel, such as one or more of the multimedia channels **140**. Any users on the network **160** 45 having access to the channels **140** or website related to the channels **140** may refresh the view, which may automatically load the presentation into that channel and/or website for viewing the content of the presentation. As such, the presentations may be distributed to various online websites, blogs, 50 mobile video players, and IP TV networks, and/or on the system site.

The collect, create, and publish modules **184**, **186**, **188** may be combined, used, and/or modified to provide the user **102** with different initial choices regarding the type of presentation and features desired for creating the multimedia presentation. The choices may be a simple, easy to use tool to quickly build presentations with dynamic content from RSS feeds and online albums. Accordingly, the user **102** may select a presentation style and, as detailed above, link it to the user's media libraries through RSS Feeds that maintain an "always on" permalink to the content source.

FIG. 3 is a block diagram of a computer system 300 suitable for implementing one or more embodiments of the present disclosure, including the user device 120, the one or 65 more distribution channels 140, and the service provider device 180. In various implementations, the client device 140

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may comprise a personal computing device capable of communicating with the network 160, such as a personal computer, laptop, cell phone, PDA, etc., the one or more merchant devices 140 may comprise a network computing device, such as a network server, and the service provider device 180 may comprise a network computing device, such as a network server. Hence, it should be appreciated that each of the devices 120, 140, 180 may be implemented as computer system 300 in a manner as follows.

In accordance with various embodiments of the present disclosure, computer system 300, such as a personal computer and/or a network server, includes a bus 302 or other communication mechanism for communicating information, which interconnects subsystems and components, such as processing component 304 (e.g., processor, micro-controller, digital signal processor (DSP), etc.), system memory component 306 (e.g., RAM), static storage component 308 (e.g., ROM), disk drive component 310 (e.g., magnetic or optical), network interface component 312 (e.g., modem or Ethernet card), display component 314 (e.g., CRT or LCD), input component 316 (e.g., keyboard), and cursor control component 318 (e.g., mouse or trackball). In one implementation, disk drive component 310 may comprise a database having one or more disk drive components.

In accordance with embodiments of the present disclosure, methods described herein are developed as a program language and embodied in a processing of computer-readable medium as executable instructions that can be used to direct a processing program when used by the computer system 300. In this regard, the computer system 300 may perform specific operations by processor 304 executing one or more sequences of one or more instructions contained in system memory component 306. Such instructions may be read into system memory component 306 from a computer readable medium, such as static storage component 308 or disk drive component 310. In other embodiments, hard-wired circuitry may be used in place of or in combination with software instructions to implement the present disclosure.

Logic may be encoded in a computer readable medium, which may refer to any medium that participates in providing instructions to processor 304 for execution. Such a medium may take many forms, including but not limited to, nonvolatile media, volatile media, and transmission media. In various implementations, non-volatile media includes optical or magnetic disks, such as disk drive component 310, volatile media includes dynamic memory, such as system memory component 306, and transmission media includes coaxial cables, copper wire, and fiber optics, including wires that comprise bus 302. In one example, transmission media may take the form of acoustic or light waves, such as those generated during radio wave and infrared data communications.

Some common forms of computer readable media includes, for example, floppy disk, flexible disk, hard disk, magnetic tape, any other magnetic medium, CD-ROM, any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, RAM, PROM, EPROM, FLASH-EPROM, any other memory chip or cartridge, carrier wave, or any other medium from which a computer is adapted to read.

In various embodiments of the present disclosure, execution of instruction sequences to practice the present disclosure may be performed by computer system 300. In various other embodiments of the present disclosure, a plurality of computer systems 300 coupled by communication link 320 (e.g., network 160 of FIG. 1, such as a LAN, WLAN, PTSN, and/or various other wired or wireless networks, including telecommunications, mobile, and cellular phone networks)

may perform instruction sequences to practice the present disclosure in coordination with one another.

Computer system 300 may transmit and receive messages, data, information and instructions, including one or more programs (i.e., application code) through communication 5 link 320 and communication interface 312. Received program code may be executed by processor 304 as received and/or stored in disk drive component 310 or some other non-volatile storage component for execution.

Where applicable, various embodiments provided by the present disclosure may be implemented using hardware, software, or combinations of hardware and software. Also, where applicable, the various hardware components and/or software components set forth herein may be combined into composite components comprising software, hardware, and/or both without departing from the spirit of the present disclosure. Where applicable, the various hardware components and/or software components set forth herein may be separated into sub-components comprising software, hardware, or both without departing from the scope of the present disclosure. In addition, where applicable, it is contemplated that software components may be implemented as hardware components and vice-versa.

Software, in accordance with the present disclosure, such as program code and/or data, may be stored on one or more computer readable mediums. It is also contemplated that software identified herein may be implemented using one or more general purpose or specific purpose computers and/or computer systems, networked and/or otherwise. Where applicable, the ordering of various steps described herein may be changed, combined into composite steps, and/or separated into sub-steps to provide features described herein.

The foregoing disclosure is not intended to limit the present disclosure to the precise forms or particular fields of use disclosed. As such, it is contemplated that various alternate 35 embodiments and/or modifications to the present disclosure, whether explicitly described or implied herein, are possible in light of the disclosure. Having thus described embodiments of the present disclosure, persons of ordinary skill in the art will recognize that changes may be made in form and detail 40 without departing from the scope of the present disclosure. Thus, the present disclosure is limited only by the claims.

What is claimed is:

1. A method comprising:

selecting a media search source via a user interface;

providing a form-based interface that allows an entry of inputs to form a media search query, wherein the form-based interface comprises at least an authentication interface, and wherein the media search query uses at 50 least a third-party hosting service for user photos;

submitting the media search query to the media search source comprising account-based modules for the third party hosting service, wherein the authentication interface authenticates a user for an account with the third-party hosting service:

receiving a media search result for viewing on the user interface based on the media search query, the media search result comprising media items from at least the account of the third-party hosting service;

displaying the media search result in a collection depository on the user interface;

clustering the media items dynamically through a Really Simple Syndication (RSS) feed into one or more stacks having a variable number of the media items, wherein 65 the variable number is selectable by the user through the user interface; 12

processing the clustered media items based on a data size of each of the media items to generate edited clustered media items:

generating a storyboard comprising the edited clustered media:

receiving a user-selected presentation comprising a plurality of different styles, wherein the plurality of different styles comprises at least two of a picture frame, a television, a billboard, a tree, a postcard, a kaleidoscope, a landscape, and a street scene, for a visual presentation;

automatically populating the user-selected presentation with the storyboard of the edited clustered media items, wherein the edited clustered media items automatically populate within a viewing window of a corresponding one of the plurality of different styles; and

storing the media search query as a custom category created by the user, wherein the custom category comprises
a user created feed having a title, a category, and an
XML-based persistence of the inputs to form the media
search query, wherein selection of a tab for the custom
category resubmits the media search query using the
user created feed.

2. The method of claim 1, wherein the step of clustering further comprises;

performing a time and an author based clustering of the media items.

3. The method of claim 1, further comprises:

dragging and dropping one or more of stacks into the storyboard.

4. The method of claim 3, further comprises:

automatically populating a network multimedia presentation with the one or more stacks for viewing over a network

- 5. The method of claim 1, wherein the media items are images.
 - 6. A system comprising:

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a non-transitory memory storing a plurality of machineexecutable instructions for clustering of media; and

one or more hardware processors coupled to the non-transitory memory and configured to read the machine-executable instructions from the non-transitory memory to cause the system to perform operations comprising: selecting a media search source via a user interface;

providing a form-based interface that allows an entry of inputs to form a media search query, wherein the form-based interface comprises at least an authentication interface, and wherein the media search query uses at least a third-party hosting service for user photos;

submitting the media search query to the media search source comprising account-based modules for the third party hosting service, wherein the authentication interface authenticates a user for an account with the third-party hosting service;

receiving a media search result for viewing on the user interface based on the media search query, the media search result comprising media items from at least the account of the third-party hosting service;

displaying the media search result in a collection depository on the user interface;

clustering the media items dynamically through a Really Simple Syndication (RSS) feed into one or more stacks having a variable number of the media items, wherein the variable number is selectable by the user through the user interface;

processing the clustered media items based on a data size of each of the media items to generate edited clustered media items;

generating a storyboard comprising the edited clustered media items;

receiving a user-selected presentation comprising a plurality of different styles, wherein the plurality of different styles comprises at least two of a picture frame, a television, a billboard, a tree, a postcard, a kaleidoscope, a landscape, and a street scene, for a visual presentation;

automatically populating the user-selected presentation with the storyboard of the edited clustered media items, wherein the edited clustered media items automatically populate within a viewing window of a corresponding one of the plurality of different styles; and

storing the media search query as a custom category created by the user, wherein the custom category comprises a user created feed having a title, a category, and an XML-based persistence of the inputs to form the media search query, wherein selection of a tab for the custom category resubmits the media search query using the user created feed.

7. The system of claim 6, wherein the one or more hardware processors are further configured to read instructions from the 25 non-transitory memory to cause the system to perform further operations comprising:

performing a time and an author based clustering of the media items.

8. The system of claim **6**, wherein the one or more hardware processors are further configured to read instructions from the non-transitory memory to cause the system to perform further operations comprising:

dragging and dropping one or more of stacks into the storyboard.

9. The system of claim **8**, wherein the one or more hardware processors are further configured to read instructions from the non-transitory memory to cause the system to perform further operations comprising:

automatically populating of a network multimedia presentation with the one or more stacks for viewing over a network.

- 10. The method of claim 6, wherein the media items are images.
- 11. A non-transitory computer-readable medium having 45 stored thereon computer executable instructions to cause a machine to perform operations comprising:

selecting a media search source via a user interface;

providing a form-based interface that allows an entry of inputs to form a media search query, wherein the form- 50 based interface comprises at least an authentication interface, and wherein the media search query uses at least a third-party hosting service for user photos;

submitting the media search query to the media search source comprising account-based modules for the third party hosting service, wherein the authentication interface authenticates a user for an account with the third-party hosting service;

receiving a media search result for viewing on the user interface based on the media search query, the media 60 search result comprising media items from at least the account of the third-party hosting service;

displaying the media search result in a collection depository on the user interface; 14

clustering the media items dynamically through a Really Simple Syndication (RSS) feed into one or more stacks having a variable number of the media items, wherein the variable number is selectable by the user through the user interface;

processing the clustered media items based on a data size of each of the media items to generate edited clustered media items:

generating a storyboard comprising the edited clustered media items;

receiving a user-selected presentation comprising a plurality of different styles, wherein the plurality of different styles comprises at least two of a picture frame, a television, a billboard, a tree, a postcard, a kaleidoscope, a landscape, and a street scene, for a visual presentation;

automatically populating the user-selected presentation with the storyboard of the edited clustered media items, wherein the edited clustered media items automatically populate within a viewing window of a corresponding one of the plurality of different styles; and

storing the media search query as a custom category created by the user, wherein the custom category comprises
a user created feed having a title, a category, and an
XML-based persistence of the inputs to form the media
search query, wherein selection of a tab for the custom
category resubmits the media search query using the
user created feed.

12. The non-transitory computer-readable medium of claim 11, wherein the operations further comprise:

performing a time and an author based clustering of the media items.

13. The non-transitory computer-readable medium of claim 11, wherein the operations further comprise:

dragging and dropping one or more of stacks into the storyboard.

14. The non-transitory computer-readable medium of claim **13**, wherein the operations further comprise:

automatically populating the network multimedia presentation with the one or more stacks for viewing over a network.

- 15. The non-transitory computer-readable medium of claim 11, wherein the media items are images.
- 16. The method of claim 1, further comprising changing the user-selected presentation created by the user through a link added to the user-selected presentation, wherein the link is to dynamically change content in the user-selected presentation
- 17. The system of claim 6, wherein the one or more hardware processors are further configured to read instructions from the non-transitory memory to cause the system to perform further operations comprising:

changing the user-selected presentation created by the user through a link added to the user-selected presentation, wherein the link is to dynamically change content in the user-selected presentation.

18. The non-transitory computer-readable medium of claim 11, wherein the operations further comprise changing the user-selected presentation created by the user through a link added to the user-selected presentation, wherein the link is to dynamically change content in the user-selected presentation.

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